

LISTING OF THE CLAIMS:

1. (Original) A thrust roller bearing, comprising:

a plurality of needle rollers; and

a cage holding said needle roller in a pocket for accommodating said needle roller;

wherein

a roller holding portion provided in said pocket has a length within a range of 30% to 80% of a length in a radial direction of said pocket.

2. (Withdrawn) The thrust roller bearing according to claim 1, wherein

said roller holding portion is constituted of a plurality of roller holding portions, and

a total length of the plurality of roller holding portions is within a range of 30% to 80% of

a length in a radial direction of said pocket.

3. (Withdrawn) The thrust roller bearing according to claim 1, wherein

said needle roller is constituted of multiple roller rows, and

a roller holding portion having a length smaller than that of the needle roller is provided in respective one of said multiple roller rows.

4. (Original) The thrust roller bearing according to claim 1, wherein

said needle roller is constituted of multiple roller rows, and

multiple needle roller rows are held by one common roller holding portion.

5. (Original) A cage holding a needle roller in a pocket for accommodating said needle roller, wherein

a roller holding portion provided in said pocket has a length within a range of 30% to 80% of a length in a radial direction of said pocket.

6. (Withdrawn) The cage according to claim 5, wherein
said roller holding portion is constituted of a plurality of roller holding portions, and
a total length of the plurality of roller holding portions is within a range of 30% to 80% of
a length in a radial direction of said pocket.

7. (Withdrawn) The cage according to claim 5, wherein
said needle roller is constituted of multiple roller rows, and
a roller holding portion having a length smaller than that of the needle roller is provided
in respective one of said multiple roller rows.

8. (Original) The cage according to claim 5, wherein
said needle roller is constituted of multiple roller rows, and
multiple needle roller rows are held by one common roller holding portion.

9. (Original) The cage according to claim 5, wherein
a shape of the roller holding portion formed on a right edge and a shape of the roller
holding portion formed on a left edge of a window of said pocket are asymmetrical to each other
with respect to a central axis of the window of said pocket.

10. (Original) A thrust roller bearing, comprising:
a plurality of rollers; and
a cage made of metal and holding said roller so as to sandwich the same with an upper
member and a lower member; wherein
a nitrocarburized case is formed to a depth in a range larger than 3 μm and smaller than
100 μm in a surface of said cage.

11. (Original) A thrust roller bearing, comprising:

a plurality of rollers; and

a cage made of metal and holding said roller so as to sandwich the same with an upper member and a lower member; wherein

in said cage, a hardened case is formed to a depth in a range larger than $3\mu\text{m}$ and smaller than $100\mu\text{m}$ in its surface,

said upper member and said lower member are superposed and bent in at least one of a radially outer side end portion and a radially inner side end portion and subjected to caulking, and

a nitrocarburized case plastically deforms in the caulked portion.

12. (Original) The thrust roller bearing according to claim 10, further comprising a rolling bearing ring positioned so as to sandwich said roller and said cage and coming in contact with said roller.

13. (Original) The thrust roller bearing according to claim 11, further comprising a rolling bearing ring positioned so as to sandwich said roller and said cage and coming in contact with said roller.

14. (Original) The thrust roller bearing according to claim 10, wherein said roller is subjected to carbo-nitriding treatment.

15. (Original) The thrust roller bearing according to claim 10, wherein said roller is constituted of multiple roller rows.

16. (Currently Amended) A cage for holding a roller, the cage comprising an upper member having a roller holding portion, and a lower member having a corresponding roller holding portion, so as to sandwich and hold the roller between same with an the upper member and [[a]] the lower member; wherein

a hardened case is formed to a depth in a range larger than 3 μm and smaller than 100 μm in a surface portion of said cage;

the upper member and the lower member are superposed on each other at inner and outer radial portions of their respective holding portions such that respective radially extending surfaces of the holding portions contact each other; and

the upper member and the lower member are caulked at the inner and outer radial portions of their respective holding portions such that an end portion of one of the upper and lower members surrounds a first face, an end face and a second face of an end portion of the other of the upper and lower members.

17. (Original) A cage holding a roller so as to sandwich the same with an upper member and a lower member; wherein

a hardened case is formed to a depth in a range larger than 3 μm and smaller than 100 μm in a surface portion of said cage,

said upper member and said lower member are superposed and bent in at least one of a radially outer side end portion and a radially inner side end portion and subjected to caulking, and

said hardened case plastically deforms in the caulked portion.

18. (Original) A thrust roller bearing, comprising:
a plurality of rollers; and
an annular cage having a plurality of pockets for holding said rollers respectively;

wherein

an end face of each of said plurality of rollers is an F end face, and
end face accuracy is at most 30 μm .

19. (Original) The thrust roller bearing according to claim 18, wherein
each of said plurality of rollers is arranged in each of said plurality of pockets in a single
row in a radial direction of said cage.

20. (Withdrawn) The thrust roller bearing according to claim 18, wherein
each of said plurality of rollers is arranged in each of said plurality of pockets in multiple
rows in a radial direction of said cage.

Please add the following new claim:

21. (New) A cage for holding a roller, the cage comprising an upper member having a
roller holding portion, and a lower member having a corresponding roller holding portion, to
sandwich and hold the roller between the upper member and the lower member; wherein
a hardened case is formed to a depth in a range larger than 3 μm and smaller than 100 μm
in a surface portion of said cage;
the upper member and the lower member are superposed on each other at inner and outer
radial portions of their respective holding portions such that respective radially extending
surfaces of the holding portions contact each other; and
the upper member and the lower member are spot-welded to each other.